

## ABSTRACT

An improved method and apparatus for performing program code conversion is provided and, more particularly, for generating improved intermediate representations for use in program code conversion. During program code conversion, a partial dead code elimination optimization technique is implemented to identify partially dead register definitions within a block of program code being translated. The partial dead code elimination is an optimization to the intermediate representation in the form of code motion for blocks of program code ending in non-computed branches or computed jumps, where target code for all dead child nodes of a partially dead register definition is prevented from being generated and target code for partially dead child nodes of a partially dead register definition is delayed from being generated until after target code is generated for all fully live child nodes for the partially dead register definition.